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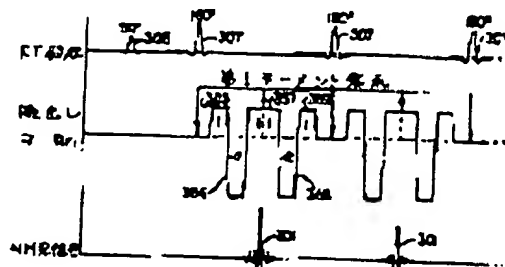
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(54) GRADIENT MOMENT NULLING METHOD IN HIGH SPEED SPIN ECHO NMR PULSE SERIES

(57)Abstract:

PURPOSE: To remove an image artifact of a CPMG scan due to a motion of fluid, by making the first moment of more than one imaging gradient to be zero in respective 180° RF refocussing pulses in the series.

CONSTITUTION: In the pulse series, an NMR system for carrying out a CPMG pulse series is contained to obtain plural views. Further, nulling gradient pulses are impressed between the pulse series in a way that the respective first moment of a nulling gradient pulse along the axis and of an imaging gradient pulse are to be zero at the center of respective RF refocussing pulses 307 used in the pulse series. The CPMG pulse series prepares a NMR echo signal 301 having a component due to a spin echo phenomenon and a component due to a stimulated echo phenomenon. And, by controlling the gradient first moments measured at the center of the respective RF refocussing pulses 307 of the CPMG pulse series, the component of the stimulated echo signal is properly compensated and the effect of fluid can be offset.



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